

1. (Currently amended) A method for recovering mesenchymal stem cells, comprising:

- (a) providing a cell mixture comprising mesenchymal stem cells and other cells;
- (b) seeding the cell mixture in a culture device comprising an upper plate with pores, said pore size ranges from about 0.4 to 20 microns in diameter, and a lower plate base to separate mesenchymal stem cells from other cells through the pores, wherein the mesenchymal stem cells retain and adhere onto the upper plate, and the other small-sized cells pass through the pores to the lower plate base; and
- (c) recovering the mesenchymal stem cells from the upper plate.

2. (Canceled)

3. (Canceled)

4. (Previously presented) The method as claimed in claim 1, wherein the cell mixture comprises mammalian mesenchymal stem cells.

5. (Canceled)

6. (Currently amended) The method as claimed in claim 5 4, wherein the cell mixture comprises human mesenchymal stem cells.

7. (Currently amended) The method as claimed in claim 5 4, wherein the cells are selected from the group consisting of a bone marrow, an

embryonic yolk sac, a placenta, an umbilical cord, a fetal, adolescent or adult body fluid, and a fetal, adolescent or adult tissue.

8. (Canceled)

9. (Previously presented) The method as claimed in claim 1, wherein the mesenchymal stem cells are differentiable into tissues comprising bone, adipose, or cartilage.

10. (Previously presented) The method as claimed in claim 1, wherein the mesenchymal stem cells are characterized by CD34-.

11. (Previously presented) The method as claimed in claim 9, wherein the mesenchymal stem cells are cultured in 10% fetal bovine serum-supplemented Dulbecco's modified Eagle's medium containing 1 g/L of glucose.

12-20. (Withdrawn)

21-22. (Canceled)

23. (Previously presented) The method as claimed in claim 5, wherein the body fluid is a bone marrow aspirate.

24-31. (Canceled)

32. (Previously presented) the method as claimed in claim 1, further comprising, after step (b), a step of removing cells not adhered on the plate by changing a culture medium.